

TITLE: USE OF SILVER GENE FOR THE AUTHENTICATION OF THE RACIAL ORIGIN OF ANIMAL POPULATIONS, AND OF THE DERIVATIVE PRODUCTS THEREOF

1/9														
-29	5' UTR	M	D	L	V	L	R	K	Y	L	L			10
SIL5	GGTCTTTGGTTGCTGGAAAGAACAGG	ATG	GAT	CTG	GTG	CTG	AGA	AAA	TAC	CTT	CTC			30
H	V	A	L	M	G	V	L	L	A	V	R	T	T	28
CAT	GTG	GCT	CTG	ATG	GGT	GTT	CTT	CTG	GCT	GTG	AGG	ACC	ACA	84
D	R	D	W	L	G	V	S	R	Q	L	R	I	K	46
GAC	AGG	GAC	TGG	CTT	GGT	GTC	TCA	AGG	CAG	CTC	AGA	ATT	AAA	138
Q	L	Y	P	E	W	T	E	S	Q	G	P	D	C	64
CAG	CTG	TAT	CCA	GAG	TGG	ACA	GAA	AGC	CAG	GGG	CCT	GAC	TGC	192
H	I	S	L	K	V	S	N	D	G	P	T	L	I	82
CAC	ATA	TCC	CTG	AAG	GTC	AGC	AAT	GAT	GGG	CCT	ACA	CTG	ATT	246
S	F	S	I	A	L	H	F	P	K	S	Q	K	V	100
TCC	TTC	TCT	ATT	GCC	TTG	CAC	TTT	CCT	AAA	AGC	CAA	AAG	GTG	300
Q	V	I	W	A	N	N	T	I	I	N	G	S	Q	118
CAG	GTC	ATC	TGG	GCC	AAC	AAC	ACC	ATC	ATC	AAT	GGG	AGC	CAG	354
Q	L	V	Y	P	Q	E	P	D	D	T	C	I	F	136
CAG	CTG	GTA	TAT	CCC	CAA	GAA	CCT	GAT	GAT	ACC	TGC	ATC	TTC	408
P	C	P	S	G	P	L	S	Q	K	R	C	F	V	154
CCC	TGC	CCT	TCT	GGC	CCT	CTA	TCT	CAG	AAA	AGA	TGC	TTT	GTT	462
T	W	D	Q	Y	W	Q	V	L	G	G	P	V	S	172
ACC	TGG	GAC	CAA	TAC	TGG	CAA	GTT	CTG	GGG	GGC	CCA	GTG	TCT	516
G	T	D	K	A	M	L	G	T	Y	N	M	E	V	190
GGG	ACA	GAC	AAG	GCA	ATG	CTG	GGC	ACA	TAT	AAC	ATG	GAA	GTG	570
R	R	G	S	Q	S	Y	V	P	L	A	H	S	S	208
CGC	CGG	GGG	TCC	CAG	AGC	TAT	GTG	CCC	CTC	GCT	CAC	TCC	AGT	624
I	T	D	Q	V	P	F	S	V	S	V	S	Q	L	226
ATT	ACT	GAC	CAG	GTG	CCC	TTC	TCT	GTG	AGT	GTG	TCT	CAG	CTG	678
G	R	N	K	R	F	L	R	K	Q	P	L	T	F	244
GGA	AGG	AAC	AAG	CGC	TTC	CTG	AGA	AAG	CAG	CCT	CTG	ACC	TTT	732
H	D	P	S	G	Y	L	A	G	A	D	L	S	Y	262
CAT	GAT	CCC	AGT	GGC	TAT	TTG	GCT	GGG	GCT	GAC	CTT	TCC	TAC	786
G	D	S	T	G	T	L	I	S	R	A	L	T	V	280
GGT	GAC	AGT	ACA	GGG	ACC	CTG	ATC	TCT	CGG	GCA	CTC	ACG	GTC	840
L	E	S	G	P	V	T	A	Q	V	V	L	Q	A	298
CTA	GAG	TCT	GGC	CCA	GTC	ACT	GCA	CAG	GTG	GTG	CTG	CAG	GCT	894
T	S	C	G	S	S	P	V	P	G	T	T	D	R	316
ACC	TCC	TGT	GGC	TCC	TCT	CCA	GTT	CCA	GGC	ACT	ACA	GAT	AGG	948
A	E	A	P	G	T	T	A	G	Q	V	P	T	T	334
GCA	GAG	GCT	CCT	GGA	ACC	ACA	GCA	GCT	GGC	CAA	GTG	CCT	ACT	1002
T	T	P	G	Q	V	P	T	A	E	A	P	G	T	352
ACC	ACA	CCT	GGC	CAG	GTG	CCA	ACT	GCA	GAG	GCC	CCT	GGC	ACC	1056
V	P	T	T	E	D	V	G	T	T	P	E	Q	V	370
GTG	CCA	ACC	ACA	GAG	GAT	GTA	GGT	ACC	ACA	CCT	GAG	CAG	GTG	1110
V	L	S	T	T	P	V	E	M	P	T	A	K	A	388
GTC	TTA	AGT	ACA	ACA	CCA	GTG	GAG	ATG	CCA	ACT	GCA	AAA	GCT	1164

Figure 1

TITLE: USE OF SILVER GENE FOR THE AUTHENTICATION OF THE RACIAL ORIGIN OF ANIMAL POPULATIONS, AND OF THE DERIVATIVE PRODUCTS THEREOF

2/9

P E V S T T E P S G T T V T Q G T T	406
CCT GAA GTG TCA ACT ACA GAG CCC TCT GGA ACC ACA GTT ACA CAG GGA ACA ACT	1218
P E L V E T T A G E V S T P E P A G	424
CCA GAG CTG GTG GAG ACC ACA GCT GGA GAG GTG TCC ACT CCT GAG CCT GCG GGT	1272
S N T S S F M P T E G T A G S L S P	442
TCA AAT ACT AGC TCA TTC ATG CCT ACA GAA GGT ACT GCA GGC TCC CTG AGT CCC	1326
L P D D T A T L V L E K R Q A P L D	460
CTG CCG GAT GAC ACT GCC ACC TTA GTC CTG GAG AAG CGC CAA GCC CCC CTG GAT	1380
C V L Y R Y G S F S L T L D I V Q G	478
TGT GTT CTG TAT CGC TAT GGC TCC TTT TCC CTC ACC CTG GAC ATT GTC CAG GGT	1434
I E S A E I L Q A V S S S E G D A F	496
ATT GAG AGT GCT GAG ATC CTA CAG GCT GTG TCA TCC AGT GAA GGA GAT GCA TTT	1488
E L T V S C Q G G L P K E A C M D I	514
GAG CTG ACT GTG TCT TGC CAA GGC GGG CTA CCC AAG GAA GCC TGC ATG GAC ATC	1542
S S P G C Q L P A Q R L C Q P V P P	532
TCA TCG CCA GGG TGT CAG CTG CCT GCC CAG CGG CTG TGT CAG CCT GTG CCC CCC	1596
S P A C Q L V L H Q V L K G G S G T	550
AGC CCA GCC TGC CAG CTG GTT TTG CAC CAG GTA CTG AAG GGT GGC TCA GGG ACC	1650
Y C L N V S L A D A N S L A M V S T	568
TAC TGC CTC AAT GTG TCT TTG GCT GAT GCC AAT AGC CTG GCG ATG GTC AGC ACC	1704
SIL3 →	
Q L V M P G Q E A G L R Q A P L F V	586
CAG CTT GTC ATG CCT GGG CAA GAA GCA GGC CTC AGG CAG GCT CCT CTG TTC GTG	1758
G I L L V L T A L L L A S L I Y R R	604
GGC ATC TTG CTG GTG CTA ACA GCT TTG TTT GCA TCT CTG ATA TAC AGG CGA	1812
R L M K Q G S A V P L P Q L P H G R	622
AGA CTT ATG AAG CAA GGC TCA GCA GTC CCC CTT CCC CAG CTG CCA CAC GGT AGA	1866
T Q W L R L P W V F R S C P I G E S	640
ACC CAG TGG CTA CGT CTG CCC TGG GTC TTC CGC TCT TGC CCC ATT GGT GAG AGC	1920
K P L L S G Q Q V * ← → SIL7 649	
AAA CCC CTC CTC AGT GGA CAG CAG GTC TGA GTG CTC TTA TGT GAA GTC ATG ATT	1974
SIL4 →	
TAC CCA GGT GGA CAG CAA GGC CTG TCT TTT CTC TGG TCT TCC CTC AGA GAC TAC ← → SIL6	2028
CAT TGC CTG AAA TAA AGA CTC AGA ACT TG ← → SIL9 Poly(A) 3'UTR	2057

Figure 1 (continued)

TITLE: USE OF SILVER GENE FOR THE AUTHENTICATION OF THE RACIAL ORIGIN OF ANIMAL POPULATIONS, AND OF THE DERIVATIVE PRODUCTS THEREOF

3/9

SIL10 →
GTTGCTGGAAGGAAGAACAGGATGGATCTGGTGTGAGAAAATACCTTCTCCATGTGGCTCTGATGGGTGTTCTCTGGC 80
TGTAAGGACCACAGAAGGTGAGTGTGGATGTTGGACATGAACAAGTGTGAATTGGGGTGCACACCTGCTCTGGTTT 160
TCTCTCCCTAAAATGGAAGATATCACTAGTAGTGCTTCAGGTGTCTCCACCCATTGATTAGTAGGAGACATGGGCAACTGA 240
GCTCCCTCCCCACATGAAGATTGGGTGCATGTGTGTTCAAGGCACTTGGGACTGAACCTGAAAACAACCCATCTACCTG 320 ← SIL8
GATGGGTGAGAGAACAGTATGTCCTCGTGGCCCTAATTGAGATGCTGAATAGTGAGCTGGAACATGGGTGCAAGG 400
TAGTAAAATGAGTGAAGAACTCATTAGGCTTGTCTCAGGCACTTGGGATAGGGTATTAGGAGATAGAGAAAGATAGGA 480
GATAGGAGAAAGGAGAAAGAGGATGTGGTATTGGATAGAAGGGTAATGAGGCACCTCATCCCTCTTGGATGGGCATG 560
GGTGAACACAGCCCAGGCTTTGTTCTGGGCTGGAAGAGACAGGCAGAAGGGTCTCAGCTGAGCATCACATGAAAGGGC 640
TCTGGGGATTGGGGCCTCGTACAGGAGCAAGGCGGGTGGGGATGGTGAGAGGGTCTGGAATGTCCCGTGC 720
TCTGAGGAGGGAGGATTGGGAGTGGAGAAAGAATGGGCATCTTATGATTCTCTTGTGTTGTGGTGGAGGTATTCACTGG 800
GATAATTCTAGATCCTCCCCAAGAGAACATCAACCAGGTTCTGGTACATGTTAGAGATGGAGTGAGGATAGTCTGTGATG 880
TGCAGAAATATCTACATTGTACCCAGTGGCCCTTCTAGATCCCTGGTCTCACAGACTTCTGGAACCTCTCCCTG 960
ATCTGACTCCCTCATTCACTGGTGTCAATTCAAGTCTTACTATGTTGCTTACTTTGGATCCAGATTAAAATCATAAGAACATT 1040
TTCATATGTGTCCACCCAGGCTTAATATGTTGCTTACTTTGGATCCAGATTAAAATCATAAGAACATT 1120
TTTATATAGTTCATGAAATTGCACTGGACTGAGTTGATAATTGTTAGTGTGAATTAAACATTGTGTTATTAAAGA 1200
AAAAAAAATTTTTTACAGAAACCTACTGAATTGTTAGGGTTAAAATAACATGATGTCTGGGATTTGCTTTGAAT 1280
GCTTCAGCAAAACAAACGAAACAACAAAATAAAGGATAGATAAACGAAATGTGACAAAATGCTGATAGTTGGAC 1360
CTTGGGGAGACACATGCAGAGCCATCACATCACTTTTCACTGGACATCTTCTGGTCAAGTGTATAATCATTGTTGTC 1440
CCCACCTCCAATTCTACTTGCCCTAGTCCATCCTCCACTGCTTGCACAGTGTACCTCTAAACACAAATCTGAT 1520
CATATTCAAAAGCTTGAAGGGTAAGTTATGGTATATGCCATATATCAGTACAACAAACAAATCGTCTGAGGTGC 1600
CGTTGCCTACAGGATAAAAGTCAAACCTCCTTGCCTGGCACTCCAAGCCCCACTCTATCTTCTGGCCTCATCTCTCAT 1680
GATGTACATCAGCCACATTGCTAGTGTCTGCCTAGGCCTCTGCCTAGAATGCTTATGCCCAACTATTACTG 1760
TCTTCTCAGTCGACCAGAGTCAATTACCTGTTAAAATCTATCATTGTTACATTGTGCTATGTCTATTGGCT 1840
CATATTAAGCAATGCCCTGGATTATAGTAATTATGTATATGTCTATTCAATACCTGAACCCCTTCAGAAC 1920
ATTCTTTTCAATTCTAAGTTGCACCTAGCCCAGTGCCTGGTACGTGCTGGTATTCACTGAGATTAAAGC 2000
TTTAAGGAACCTCCCTGGTGCATCAAGTGGCTAAGGCTCTGTGCTCCAAATGCAGGGGACCAGGGTTCAATCTCAGG 2080
TCAGGAACTAGATCCCACAGGTACAACTAAGAGTTGCAAGGCCACAACACTACCTGACCTCACATGCCACAACATCGA 2160
AGATCCCTGTGCTGCAACTAAGTCTAGTGCAGTTAAAATATTTTTAATGCACCTTGAATGTGAGAATGAATGATG 2240
TGTACAGACACTGTTGTCCTGGAGAAGGGAGTGTGAAATGATTGAGGGCCCTCATAGTATATCTCTTTAGGAC 2320
CCAGAGACAGGGACTGGCTTGGTGTCAAGGCAGCTCAGAATTAAAGCATGGAACAGACAGCTGTATCCAGAGTGGACA 2400
GAAAGCCAGGGGCCTGACTGCTGGAGAGGTAGGAACCTGGCAATTCCAGGGAGGATATGGTGGAAATGGGTGGGAGGG 2480
GAACGGGTTGAATGTAATTAGGAAGATAGGAAGGAAAGGCACTACAGGGAGGAGAGCCAAGGGAGCTAATTATGCAG 2560
CTGCCCTTTCAGGTGGCCACATATCCCTGAAGGTCAAGGCACATGATGGGCCTACACTGATTGGGCAAATGCTTCTCTC 2640
TATTGCCCTTGCACTTCTAAAGCCAAAGGTCTGCCAGATGGCAGGTCACTGGGCAAACACACCATCATCAATG 2720
GTGAGTACCTCTCCGCCTCTCCAAAGGTCCAGAATCCCTGGTATCCCCAATGAGCTCAAGGAATCCTCCTCCTCTT 2800
TTTTTTTTTTTACAAATTATATGTAACACATATTCACTGCAGAAAATTAGAAAACACAGATAAACCAAAAGA 2880

Figure 2

4 / 9

AAAAAAATTATAGTCCCCAATGGGGCACAGAACCCAGTGGACATAGAAGTGGATAGACTGGATTAAACTGGTT	2960
ACCACTATGTGACCCCTGGACAAGTCACTGAATTGTTGTTCCATTCCCTATCTATAGAATGGGGATGATAACACT	3040
TTAAAGGTTCTTGTAAAGGATTAAGGATTAATGTGATAATATATAAGATTTAGCATAATGCCCTGTGCTGTGCTTAGTA	3120
CCTTAGTTAGACGCTTGTCAACCCATGGACTGTAGCCACCAGGCTCCCTGTCCATGTGGATTCTGCAGGCAAGAAT	3200
ACTGGAGTGGTCACCATGCACCCCTCCAGGGATCTCCAACTCAGGGATCGAACCCAGGTCCAGCCTACAGTATTA	3280
ATTGATGCTGTTATTTTACTTTATCCACTAGCTAGAGCACATCATCCTAGACATTTGATACATGCCCTACCAATTT	3360
GTGTCCAGTGTAAAGAATATACATGTGTGTCAGTGGCTCAGTCGTGACTCTTGCAACCCATGGACTGTAGCC	3440
CGGAAAGCTCCTGTCCATGGATTGCCAGCCAAGAATCTGGAGCAGGTTGCCATTCTCCAGGGATCTT	3520
CAACACAGGGATTGAATCCTGTCTCCTGTGTTCCCTGCATTGGCAGGTGATTCTTACCACTGAGCCACCTGGAAAC	3600
CCCTTAAGTATATACACATAAATCTTTATAGTTCCATTCTCCCTTACCACTCCAAATAGGTATACCAAGGAGAAT	3680
GTATTTGGTAGCTAGGCAGTATTCCCTGGAGCCCTCTCTGGGAGTCATGTTAAAGGTTTGGTGTACAGTGAGGAATGC	3760
CAGGGATTGAGGGAGACTTGCTGTTCTTCAGGGAGCCAGGTGTTGGGAGGACAGCTGGTATATCCCAAGAACCTG	3840
ATGATAACCTGCATCTCCCCGATGGGGAGCCCTGCCCTCTGGCCCTCATCTCAGAAAAGATGCTTGTGTTATGTCTGG	3920
AAGACCTGGGTAAGAGTTCCCTCTGGCCTGTCAATTACACTAAATTCACTTCTCCACCTGATCCCCCTTCTT	4000
TTGGTCTCATCTTAAATTCTGTGAGTTCCCTAATCTTCACTTCCCCATGACTCCTCTCCACAGCACCTAGTC	4080
AACTCTATTATACTCTTCTGGGAGCCCTGCTCCAATTATAGTCCCACCCATGGACCCCTCTCATAAGGACTTTTCC	4160
TGCCCAACATATGCAAGCTTAAACTCTGTGAAATAACCACCTTGATACATCTCCTGACCTTCTCTGGTCCATCT	4240
CTAACCTGCCAGTCTCTTGCAGTAACCCCTCCCTACTCTCTTCCAAAACCTCAGACCAAAACTGGCAA	4320
GTTCTGGGGGCCAGTGTCTGGACTGAGCATGGGACAGACAAGGCAATGCTGGCACATATAACATGGAAGTGTACTGT	4400
CTACCCGCCGGGGTCCAGAGCTATGTGCCCTCGCTCACTCCAGTTCAGCCTTCAACCATTACTGTAAGGACTGAG	4480
GAGGGACAAGGCCAGTGCAGGGCAGGAGAAGGTGGGAGGCTGGCTGGACAGGAAAGGGAAAGGAGAAATGGTGTG	4560
TAACCTTACAGGGCAGAACCAAGGAAGATGTGGCAGAGGGATGTGGGCTTGGAGCCGTGAAGGCCAGGCAGCTGG	4640
GTTGGTGAAGGATATGGCTGTGAAAGAAGAAGCTGACAGAAAGAACCTATGGTCTCACTTCTCTGACTCCAATC	4720
CCAGACCAAGGTGCCCTCTGTGAGTGTCTCAGCTGCAGGCCCTGGATGGAAGGAACAAGCCTTCTGAGAAAGCA	4800
GCCTCTGACCTTGGCCCTCCAGCTCCATGATCCCAGTGGCTATTTGGCTGGGCTGACCTTCTCACCTGGACTTTG	4880
CTGACAGTACAGGGACCCGTATCTCGGGCACTCACGGTCACTCACACTACCTAGAGTCTGGCCAGTCAGTCACAG	4960
GTGGTGTGCAGGCTGCCATTCCCTCACCTCTGTGGCTCCCTCCAGTCCAGGCACTACAGATAGGCATGTGACAAC	5040
TGCAGAGGCTCTGGAACACCACAGTGGCAAGTGGCTGGGTGCCAACACAGAGGATGTAGGTACCAACCTGAGCAGGTGGCAACCTCC	5120
CAGAGGCCCTGGCACCAACAGTGGCTGGGTGCCAACACAGAGGATGTAGGTACCAACCTGAGCAGGTGGCAACCTCC	5200
AAAGCTTAAAGTACAACACCAAGTGGAGATGCCAAGTGCAGAAAGCTACAGGTAGGACACCTGAAAGTGTCAACTACAGAGCC	5280
CTCTGGACCACAGTTACACAGGGAAACAACCTCCAGAGCTGGTGGAGACCACAGCTGGAGAGGTGTCCACTCCTGAGCCTG	5360
CGGGTTCAAATACTAGCTATTGCTACAGAAGGTACTGCAGGTAAAGGGGCCACCATGAATGAGTCATAGAGGTG	5440
GGGCATTGTCACAGCTGTGAAAGACTGAAAGAATTGCTCAGGACCCAGATGTTACTCAATCCTAGCTTAGCAGTGGAG	5520
TCCCCTCAGAATCTCACTGGTTAAACCCCTAAGTCCTCTTAATGGCACAGAAATAGATCCAGAGTTCAGGAAACC	5600
AGGGTCTCTCCTAGGCCAGGGTAGAGAGCTATTCTCTTCTGAAAGAGAAGTTCAGGAAGCAGTGTGTGATCATTT	5680
GGTGGTGGTGTCAAGTCAGTGTACTCTTGACCTCATGGACTATGCCACCCAGGCTCCTGTCCATAGAATTCT	5760

Figure 2 (continued 1)

TITLE: USE OF SILVER GENE FOR THE AUTHENTICATION OF THE RACIAL ORIGIN OF ANIMAL POPULATIONS, AND OF THE DERIVATIVE PRODUCTS THEREOF

5/9

CCAGGCAGAACACTGGAGTGGGTGCCATTCTTCTCCAGGGATTCTGCCAGGGATTAAACCGAATTGGCA	5840
GGTGGATTCTTACCCGAGCCACCTAGAAAGTCCCAGTGATCATTAGATAATACTTACCTCATTCTGATTAAGTG	5920
TAAACACAGAAATCTTCTGACACCCTTCCCACCCCTGGATTCCATCCAAAGTAGGTTACCTGGAATTGTGGTAGG	6000
AATACTAAAAAGGGAGAAGTGAGATAGTGACACTATGACTTAACACATGTCAAATGTCAGTCTGACCCAGGACCTGGCACAGTG	6080
TAGGGTGTGATAAACATTGGATGTCTAAATTCTGACTCTAACCTGTGACTCTGGGCAGTCATTCTCTGGCCT	6160
TTCTTTATCTAAAAATGAGAGTTCCAGCTTGTCTGATTCTAACGCTGGATCCAGTAGCTCTGACTCTACCTGGAA	6240
AAATGCTTGTGGGCCTGTTTCAGGTTAGTCATTGCTTTGACTTGCCTTTAACCTCTCCAGGCTCCCTG	6320
AGTCCCCCTGCCGGATGACACTGCCACCTTAGCCTGGAGAACGCCAAGCCCCCTGGATTGTGTTCTGATCGCTATGG	6400
CTCCTTTCCCTCACCCCTGGACATTGTCCTGGAGTCTGCTACATTGTCCTGAAGCTGGTAGGGAGGCGTGTGCTGC	6480
TTAGGGTGCAGTGGAAAGCACACCTGGAAGGAATTACTCACCTGGACAAGGAGAACATCCCAGATCCAGGGTTCA	6560
TATGAAGGCAGAATGGGATTAGGGAGGCAGCCCGAGGACCTTCTGGCATGGCCTTGGGGAGGATAAGTAGAGGAGT	6640
CTCAGACTAAAAAAATCTGCACTTGCAGAGGGTATTGAGAGTGCTGAGATCCTCACGGCTGTGTCATCCAGTGAAG	6720
GAGATGCAATTGAGCTGACTGTCTTGCAAGGCGGGTGAGTGTCCCACGGTTGCCAGAACCTCTGGGTGACTGC	6800
TGTCCTGTTCTCTGGTGTCTAGTGTCCCTCCAGATTCCCTGACGTAAGCTGACATCTCTCCAGGCTACCCAGGAAG	6880
CCTGCATGGACATCTCATGCCAGGGTGTCACTGCCTGCCAGCGGCTGTGTCAGCCTGTGCCAGGCCAGCCTGC	6960
CAGCTGGTTGCACCAGGTACTGAAGGGGGCTCAGGGACCTACTGCCCTCAATGTGTTGGCTGATGCCAATAGCCT	7040
GGCGATGGTCAGCACCCAGCTGTCACTGCCCTGGTAGGTAGTGGACAAGAGGTAGGATGAAGACACGGGGAGATGGTAGA	7120
GGTTACCTACTAGAGGAAGCAGACACTGAATGCAGCCGTATCTGGGATTCCACCCATAGGGCAAGAACGCCAGGGC	7200
AGGCTCCCTGTTGTCGGCATCTGCTGGTGCTAACAGCTTGTGCTGATCTGATATACAGGTGAGATCCCCGC	7280
CATCCTGCTCCCACTCTTACCCCTATTACCAACCACACTCTCCTCATGGAAAGAACACCACCAACCCCTTGGG	7360
AAAGTGTAGAGTCCAAGAAAGAGCCAGACTTGAAGTTCAACAGGTCTAGGCTGCAGTCTGCTGGGGACCTGGGG	7440
AAAGTCATTAACCCCTCTGAGCCACTGAAAAGTAGGAAACATAATACCTGCTCTGCTGGGCTGTTTCAGGGCTCTAGAC	7520
AATGTGAGTAAAACACCTGGTCTGAAACAAAAGTGAATAATGATGATCTCAATGACTGTTGTTGAATAATATCAA	7600
CAGTGGAGAAACTCAGTAACGTGAGTTCTCCACCTGCCAGAAAGGCAAATCCCTAGGCCTGGAGGGCTGAGGTCTCA	7680
AAGCAGGGAGCCTGTAGGGTGAGAGGGAAATGGTCAGAGCTTACCCATAAACATAAGAGAGGATAAACCTGTTGGTGAG	7760
AAGAGGAGGGAGCCAGGATCAAGACCAACTCAACCTGGTTATGGTTAGTCTTTTTAGAGAAGCACAAAGAGGT	7840
TGCCATTGACCACCACTAACCACTGATCCCTGCTTCTCCAAATATCAGGCAGACTTATGAGCAAGGCTCAGCAGTC	7920
CCCCCTCCCCAGCTGCCACACGGTAGAACCCAGTGGCTACGTCCTGCCCTGGCTTCCGCTCTGCCCAATTGGTGAGAG	8000
CAAACCCCTCCTCAGTGGACAGCAGGTCTGAGTGCTCTTATGTGAAGTCATGATTTACCCAGGTGGACAGCAAGGCCTGT	8080
CTTTCTGGTCTTCCCTCAGAGACTACCATTGCCGAAATAAGACTCAGAACATTG	8138

SIL9

Figure 2 (continued 2)

TITLE: USE OF SILVER GENE FOR THE AUTHENTICATION OF THE RACIAL ORIGIN OF ANIMAL POPULATIONS, AND OF THE DERIVATIVE PRODUCTS THEREOF

6/9

CDNA CH	GGTCTTGGTTGCTGGAAGGAAGAACAGGATGGATCTGGTGTGAGAAAATACCTTCTCC	60
CDNA RPE1	-----	
CDNA CH	ATGTGGCTCTGATGGGTGTTCTCTGGCTGTAAGGACACAGAAGGACCCAGAGACAGGG	120
CDNA RPE1	-----	
CDNA CH	ACTGGCTTGGTGTCTCAAGGCAGCTCAGAATTAAAGCATGGAACAGACAGCTGTATCCAG	180
CDNA RPE1	-----	
CDNA CH	AGTGGACAGAAAGCCAGGGCCCTGACTGCTGGAGAGGTGGCCACATATCCCTGAAGGTCA	240
CDNA RPE1	-----	
CDNA CH	GCAATGATGGGCCTACACTGATTGGGCAAATGCTTCCTCTCTATTGCCTTGCACTTTC	300
CDNA RPE1	-----	
CDNA CH	CTAAAAGCCAAAAGGTGCTGCCAGATGGCAGGTCACTGGGCCAACAACACCATCATCA	360
CDNA RPE1	-----	
CDNA CH	ATGGGAGCCAGGTGTGGGAGGACAGCTGGTATATCCCCAACAAACACCATCATCA	420
CDNA RPE1	-----	
CDNA CH	TCTTCCCCGATGGGAGCCCTGCCCTCTGCCCTCTATCTCAGAAAAGATGCTTGT	480
CDNA RPE1	-----	
CDNA CH	ATGTCTGGAAGACCTGGACCAATACTGGCAAGTTCTGGGGGGCCAGTGTCTGGACTGA	540
CDNA RPE1	-----CCAAATACTGGCAAGTTCTGGGGGGCCAGTGTCTGGACTGA	41
CDNA CH	*****	
CDNA RPE1	GCATCGGGACAGACAAGGAATGCTGGGCACATATAACATGGAAGTGACTGTCTACCACC	600
CDNA RPE1	GCATCGGGACAGACAAGGAATGCTGGGCACATATAACATGGAAGTGACTGTCTACCACC	101
CDNA CH	*****	
CDNA RPE1	GCCGGGGGTCCCAGAGCTATGTGCCCTCGCTCACTCCAGTTCAGCCTTCACCATTACTG	660
CDNA RPE1	GCCGGGGGTCCCAGAGCTATGTGCCCTCGCTCACTCCAGTTCAGCCTTCACCATTACTG	161
CDNA CH	*****	
CDNA RPE1	ACCAGGTGCCCTCTGTGAGTGTCTCAGCTGCAGGCCTGGATGGAAGGAACAAGC	720
CDNA RPE1	ACCAGGTGCCCTCTGTGAGTGTCTCAGCTGCAGGCCTGGATGGAAGGAACAAGC	221
CDNA CH	*****	
CDNA RPE1	GCTTCCTGAGAAAGCAGCCTCTGACCTTGCCTCCAGCTCCATGATCCCAGTGGCTATT	780
CDNA RPE1	GCTTCCTGAGAAAGCAGCCTCTGACCTTGCCTCCAGCTCCATGATCCCAGTGGCTATT	281
CDNA CH	*****	
CDNA RPE1	TGGCTGGGCTGACCTTCCTACACCTGGACTTGGTACAGTACAGGGACCTGATCT	840
CDNA RPE1	TGGCTGGGCTGACCTTCCTACACCTGGACTTGGTACAGTACAGGGACCTGATCT	341
CDNA CH	*****	
CDNA RPE1	CTCGGGCACTCAGGTCACTCACACTTACCTAGAGTCTGGCCCACTGCACAGGTGG	900
CDNA RPE1	CTCGGGCACTCAGGTCACTCACACTTACCTAGAGTCTGGCCCACTGCACAGGTGG	401
CDNA CH	*****	
CDNA RPE1	TGCTGCAGGCTGCCATTCCCTCTCACCTCCTGTGGCTCCTCCAGTCCAGTCCAGGC	960
CDNA RPE1	TGCTGCAGGCTGCCATTCCCTCTCACCTCCTGTGGCTCCTCCAGTCCAGTCCAGGC	461
CDNA CH	*****	
CDNA RPE1	*****	

Figure 3

TITLE: USE OF SILVER GENE FOR THE AUTHENTICATION OF THE RACIAL ORIGIN OF ANIMAL POPULATIONS, AND OF THE DERIVATIVE PRODUCTS THEREOF

7/9

CDNA CH	ATAGGCATGTGACAACCTGCAGAGGCTCTGGAACCCACAGCTGGCAAGTGCCTACTACAG	1020
CDNA RPE1	ATAGGCATGTGACAACCTGCAGAGGCTCTGGAACCCACAGCTGGCAAGTGCCTACTACAG	521

CDNA CH	AAGTCATGGCACCACACCTGGCAGGTGCCAACTGCAGAGGCCCCCTGGCACCAAGTTG	1080
CDNA RPE1	AAGTCATGGCACCACACCTGGCAGGTGCCAACTGCAGAGGCCCCCTGGCACCAAGTTG	581

CDNA CH	GGTGGGTGCCAACACAGAGGATGTAGGTACACACCTGAGCAGGTGGCAACCTCCAAAG	1140
CDNA RPE1	GGTGGGTGCCAACACAGAGGATGTAGGTACACACCTGAGCAGGTGGCAACCTCCAAAG	641

CDNA CH	TCTTAAGTACAACACCAAGTGGAGATGCCAACTGCACAAAGCTACAGGTAGGACACCTGAAG	1200
CDNA RPE1	TCTTAAGTACACACCAAGTGGAGATGCCAACTGCACAAAGCTACAGGTAGGACACCTGAAG	701

CDNA CH	TGTCAACTACAGAGCCCTCTGGAACCCACAGTTACACAGGAAACAACCTCCAGAGCTGGTGG	1260
CDNA RPE1	TGTCAACTACAGAGCCCTCTGGAACCCACAGTTACACAGGAAACAACCTCCAGAGCTGGTGG	761

CDNA CH	AGACCACAGCTGGAGAGGTGTCCACTCCTGAGCCTGCCGGATGACACTGCCACCTTAG	1320
CDNA RPE1	AGACCACAGCTGGAGAGGTGTCCACTCCTGAGCCTGCCGGATGACACTGCCACCTTAG	821

CDNA CH	TGCCTACAGAAGGTACTGCAGGCTCCCTGAGTCCCCCTGCCGGATGACACTGCCACCTTAG	1380
CDNA RPE1	TGCCTACAGAAGGTACTGCAGGCTCCCTGAGTCCCCCTGCCGGATGACACTGCCACCTTAG	881

CDNA CH	TCCTGGAGAACGCCAACGCCCCCTGGATTGTGTTCTGTATCGCTATGGCTCCTTTCCC	1440
CDNA RPE1	TCCTGGAGAACGCCAACGCCCCCTGGATTGTGTTCTGTATCGCTATGGCTCCTTTCCC	941

CDNA CH	TCACCCCTGGACATTGTCAGGGTATTGAGAGTGCTGAGATCCTACAGGCTGTGTATCCA	1500
CDNA RPE1	TCACCCCTGGACATTGTC---AGTATTGAGAGTGCTGAGATCCTACAGGCTGTGTATCCA	998

CDNA CH	GTGAAGGAGATGCATTGAGCTGACTGTGTTGCAAGGCGGGCTACCCAAGGAAGCCT	1560
CDNA RPE1	GTGAAGGAGATGCATTGAGCTGACTGTGTTGCAAGGCGGGCTACCCAAGGAAGCCT	1058

CDNA CH	GCATGGACATCTCATGCCAGGGTGTCAAGCTGCCAGCGGCTGTGTCAAGCTGTGC	1620
CDNA RPE1	GCATGGACATCTCATGCCAGGGTGTCAAGCTGCCAGCGGCTGTGTCAAGCTGTGC	1118

CDNA CH	CCCCCAGCCCTGCCAGCTGGTTTGCAACCAGGTACTGAAGGGTGGCTCAGGGACCT	1680
CDNA RPE1	CCCCCAGCCCTGCCAGCTGGTTTGCAACCAGGTACTGAAGGGTGGCTCAGGGACCT	1178

CDNA CH	ACTGCCTCAATGTGCTTGCTGATGCCAATAGCCTGGCGATGGTCAGCACCCAGCTTG	1740
CDNA RPE1	ACTGCCTCAATGTGCTTGCTGATGCCAATAGCCTGGCGATGGTCAGCACCCAGCTTG	1238

CDNA CH	TCATGCCTGGCAAGAACGAGGCTCAGGCAGGCTCTGTTGTGGCATCTGCTGG	1800
CDNA RPE1	TCATGCCTGGCAAGAACGAGGCTCAGGCAGGCTCTGTTGTGGCATCTGCTGG	1298

CDNA CH	TGCTAACAGCTTGCTGCTGATCTCTGATATACAGGCGAAGACTTATGAAGCAAGGCT	1860
CDNA RPE1	TGCTAACAGCTTGCTGCTGATCTCTGATATACAGGCGAAGACTTATGAAGCAAGGCT	1358

CDNA CH	CAGCAGTCCCCCTCCCCAGCTGCCACACGGTAGAACCCAGTGGCTACGTCTGCCCTGGG	1920
CDNA RPE1	CAGAAGTCCCCCTCCCCAGCTGCCACACGGTAGAACCCAGTGGCTACGTCTGCCCTGGG	1418

Figure 3 (continued 1)

8 / 9

cDNA CH	TCTTCGCTCTGCCCATGGTGGAGAGCAAACCCCTCCAGTGGACAGCAGGTC TGAG	1980
cDNA RPE1	TCTTCGCTCTGCCCATGGTGGAGAGCAAACCCCTCCAGTGGACAGCAGGTC TGAG	1478

cDNA CH	TGCTCTTATGTGAAGTCATGATTACCCAGGTGGACAGCAAGGCCTGTCTGGT	2040
cDNA RPE1	TGCTCTTATGTGAAGTCATGATTACCCAGGTGGACAGCAAGGCCTGTCTGGT	1538

cDNA CH	CTTCCCTCAGAGACTACCATTGCCTGAAATAAGACTCAGAACTTG	2086
cDNA RPE1	CTTCCCTCAGAGACTACCATTGCCTGAAATAAGACTCAGAACTTG	1584

Figure 3 (continued 2)

TITLE: USE OF SILVER GENE FOR THE AUTHENTICATION OF THE RACIAL ORIGIN OF ANIMAL POPULATIONS, AND OF THE DERIVATIVE PRODUCTS THEREOF

9/9

Prot. CH	MDLVLRLKYLHVALMGVLLAVRTTEGPRDRDWLGVSRQLRIKAWNQLYPEWTESQGPDC	60
Prot. RPE1	-----	
Prot. CH	WRGGHISLKVSNDGPTLIGANASFSIALHFPKSQKVLPDGQVIWANNTIINGSQVWGGQL	120
Prot. RPE1	-----	
Prot. CH	VYPQEPPDTCTIFPDGEPCPSGPLSQKRCFVYVWKTWDQYWQVLGGPVSGLSIGTDKAMLG	180
Prot. RPE1	-----	QYWQVLGGPVSGLSIGTDKAMLG 23
Prot. CH	*****	*****
Prot. RPE1	TYNMEVTVYHRRGSQSYVPLAHSSAFTITDQVPFSVSVSQLQALDGRNKRFLRKQPLTF	240
Prot. RPE1	TYNMEVTVYHRRGSQSYVPLAHSSAFTITDQVPFSVSVSQLQALDGRNKRFLRKQPLTF	83
Prot. CH	*****	*****
Prot. RPE1	ALQLHDPSGYLAGADLSYTWDFGDSTGTLISRALTVTHTYLESGPVTAQVVLQAAIPLTS	300
Prot. RPE1	ALQLHDPSGYLAGADLSYTWDFGDSTGTLISRALTVTHTYLESGPVTAQVVLQAAIPLTS	143
Prot. CH	*****	*****
Prot. RPE1	CGSSPVPGTTDRHVTAEAPGTTAGQVPTTEVMGTPQVPTAEAPGTTVGVWPTTEDVG	360
Prot. RPE1	CGSSPVPGTTDRHVTAEAPGTTAGQVPTTEVMGTPQVPTAEAPGTTVGVWPTTEDVG	203
Prot. CH	*****	*****
Prot. RPE1	TTPEQVATSKVLSTTPVEMPTAKATGRTPEVSTTEPSGTTVTQGTTPELVEVTAGEVSTP	420
Prot. RPE1	TTPEQVATSKVLSTTPVEMPTAKATGRTPEVSTTEPSGTTVTQGTTPELVEVTAGEVSTP	263
Prot. CH	*****	*****
Prot. RPE1	EPAGSNTSSFMPTEGTAGSLSPLPDDTATLVLEKRQAPLDCVLYRYGSFSLTLDIVQIE	480
Prot. RPE1	EPAGSNTSSFMPTEGTAGSLSPLPDDTATLVLEKRQAPLDCVLYRYGSFSLTLDIV-SIE	322
Prot. CH	*****	*****
Prot. RPE1	SAEILQAVSSSEGDAFELTVSCQGGLPKEACMDIISSPGCQLPAQRLCQPVPPSPACQLVL	540
Prot. RPE1	SAEILQAVSSSEGDAFELTVSCQGGLPKEACMDIISSPGCQLPAQRLCQPVPPSPACQLVL	382
Prot. CH	*****	*****
Prot. RPE1	HQVLKGGSGTYCLNVSLADANSLAMVSTQLVMPQEAQLRQAPLFVGILLVLTALLASL	600
Prot. RPE1	HQVLKGGSGTYCLNVSLADANSLAMVSTQLVMPQEAQLRQAPLFVGILLVLTALLASL	442
Prot. CH	*****	*****
Prot. RPE1	IYRRRLMKQGSAVPLPQLPHGRTQWLRLPWVFRSCPPIGESKPLLSGQQV	649
Prot. RPE1	IYRRRLMKQGSVPPLPQLPHGRTQWLRLPWVFRSCPPIGESKPLLSGQQV	491
Prot. CH	*****	*****

Figure 4